



**UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/215,367	12/18/98	BERTIN	D 2988-644

PENNIE & EDMONDS
1155 AVENUE OF THE AMERICAS
NEW YORK NY 10036-2711

IM22/0410

EXAMINER

ASINOVSKY, O

ART UNIT	PAPER NUMBER
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1711

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DATE MAILED: 04/10/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/215,367

Applicant(s)
Bertin

Examiner
Olga Asinovsky

Group Art Unit
1711



☒ Responsive to communication(s) filed on the applicants' amendment and remarks of 02/09/2000.

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-4, 6, and 8-33 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-4, 6, and 8-33 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☒ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 9

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claim 1 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite. Bracketing or underlining are commonly used to indicate amendments or changes in the claims as provided in 37 CFR 1.121(a)(2)(ii) and are normally not intended to be printed in the published patent. In the reply filed 02/09/00, applicant has used underlining in such a manner that it is unclear to the examiner whether the underlining is intended to appear in the patent. The underlining is unclear because there is no reason to use underlining. If underlining and/or bracketing is intended to appear in the claims in the published patent, such intention must be clearly indicated in applicant's reply to this notice.

The examiner presumes that the bracket on line 8 is indicated to delete this part.

Claim Rejections - 35 USC § 103

2 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6 and 8-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Veregin et al'5,610,250.

The rejection is set forth in paragraph 1 at pages 2-3 of the office action mailed on 11/10/99, paper No. 7 and is incorporated here by reference.

Applicant's arguments filed 02/09/00 have been fully considered but they are not persuasive.

The applicants' argument is that the present invention is directed to a polymerization process for manufacturing polymers with narrow polydispersity and block copolymer using a very small amount of stable free radical (page 4, lines 18-20, in the applicants' remarks). Applicants argue that Veregin discloses a polymerization process for a polymer with narrow polydispersity using a large amount of the stable free radical, and that (Veregin, column 24, lines 18-20) if the molar ratio [SFR : INIT] is too low then the reaction product has undesired increased polydispersity. This argument is not accepted because the present claims disclose a process for the preparation of a polymer or copolymer comprising a step of polymerization or copolymerization without unexpected result for using a small amount of stable free radical for the final polymer. No one claim discloses "narrow polydispersity." Therefore, products by process in the present claims are met by any product. The chosen ratio between the moles of the stable free

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radical agent and free radical initiator is not controlled in the present claims for obtaining an unexpected result in a final product. Veregin discloses that a stable free radical compound or agent can be selected such as 2,2,6,6-tetramethyl-1-piperidinyloxy (TEMPO) compound which is within the scope of the applicants' claims and in the working examples in the present specification. Moreover, the applicants argue about deficiency in Veregin's invention that "if the [SFR : INIT] is too low then the reaction product has undesired increased polydispersity". However, this argument is related to if a stable free radical agent is a 2,4,6-tri-tert-butyl phenoxy radical. Veregin discloses that a polydispersity index in the polymerized polymer is of from 1.0 to 2.0 (claim 1) that it is within the scope of 1.8 in the applicants' working example 1 at page 23. Veregin discloses the same living polymerization process wherein the same free stable radical agent and an initiator can be selected. Therefore, it would still have been obvious to one of ordinary skill in the art to use a polymerization process in Veregin's invention wherein a ratio $(\text{SFR}:\text{INIT}) < 0.15$ can be selected since this ratio is depending on the monomer/comonomer system, the quantity and type of polymerization initiator and stable free radical agent by controlling the desired PD index for the polymerized (co)polymer, all of these requirements can be the same in Veregin's invention. In the absence of any unexpected results obtaining by selected a small amount of a stable free radical, it would have been obvious to one of ordinary skill in the art to use the same polymerization process in Veregin's invention for obtaining the same PD index

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for the polymer, and thereby, the amount of a stable free radical can be obtained within the same resulting expectation. The motivation is that it is within the skill of one in the art to use a polymerization process in Veregin's invention wherein a free stable radical agent can be selected in the amount for providing the balance desired between the mole ratio of the stable free radical agent and free radical initiator of less than 0.15 since Veregin discloses the same process and the same ingredients can be selected and the same narrow polydispersity can be obtained.

3 The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The prior art is relevant to show the state of the art knowledge.

At the present time the examiner is unable to get the pending U.S. patent applications submitted with the supplemental IDS, pages 1-2, for reviewing the conflicting claims. Therefore, the examiner asked to send a copy of claims of the pending applications.

4 Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5 Any inquiry concerning this communication should be directed to Olga Asinovsky at telephone number (703) 308-0041.

O. A.

O. A.

April 07, 2000


James J. Setlock
Supervisory Patent Examiner
Technology Center 1712